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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,338	06/03/2005	Andreas Goeke	102790-194(30062 US)	2948
27380 7590 07/22/2008 NORRIS, MCLAUGHLIN & MARCUS 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022				
EXAMINER PEPITONE, MICHAEL F				
ART UNIT		PAPER NUMBER		
1796				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/534,338

**Applicant(s)**

GOEKE, ANDREAS

**Examiner**

MICHAEL PEPITONE

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 3-8 is/are rejected.  
7) ☒ Claim(s) 2 and 9-14 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/IS/C)  
Paper No(s)/Mail Date 6/6/05, 5/10/05, 8/9/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of species (i) {the bond between C<sub>1</sub> and C<sub>2</sub> is a single bond} in the reply filed on 4/9/08 is acknowledged. The traversal is on the ground(s) that a single search could be carried out for both species. This is not found persuasive because the single bond species {species (i)} also contains at least one cycloalkane ring, which would require different search protocol from the double bond species {species (ii)}.

The requirement is still deemed proper and is therefore made FINAL.

### *Claim Rejections - 35 USC § 103*

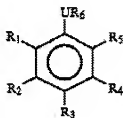
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Köhler *et al.* (US 5,387,718).

Regarding claim 1: Köhler *et al.* teaches alkylphenyl alkyl thioethers having the general formula:

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where U represents O or S; and

$R_1$ - $R_6$  each independently represent an alkyl or aryl group, but  $R_1$ - $R_5$  may each independently represent a functional group other than these, including, e.g., but not limited to,  $-\text{COOR}$ ,  $-\text{NO}_2$ ,  $-\text{NH}_2$ ,  $-\text{O}-\text{CH}_2-\text{CH}_2-\text{OH}$ ,  $-\text{OH}$ ,  $-\text{CHO}$ , or -halogen; further

$R_1$ - $R_5$  may be bridged by suitable bifunctional substituents, such as, e.g.,  $-(\text{CH}_2)_x-$ , or  $-(\text{CH}_2)_x-\text{Z}-(\text{CH}_2)_y-$  (where Z represents a hetero atom;  $x=0-7$ , and  $y=0-7$ ), or preferably unsaturated substituents such as are characteristic of anellated ring systems, e.g. (but not limited to) naphthyl, phenanthryl, anthracenyl, quinolyl, isoquinolyl, or indolyl.

(1:15-42); wherein U=S,

$R_6=\text{Me}$ ,  $R_3=\text{alkyl}$  having a fused  $\text{C}_{0-7}$  cycloalkyl ring  $R_1=R_2=R_4=R_5=\text{H}$  (2:60-67; 3:6-12; 4:48-46; 6:50-59).

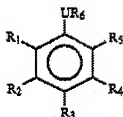
The Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents. Therefore, the claimed effects and physical properties, i.e. spicy and anisic odor notes, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

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Regarding claims 3-4 and 6-7: Köhler *et al.* teaches alkylphenyl alkyl thioethers as fragrances [instant claims 3-4] (5:42-45) and stabilizers for oils used in food and feed [instant claims 6-7] (5:42-45).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Köhler *et al.* (US 5,387,718).

Regarding claim 8: Köhler *et al.* teaches alkylphenyl alkyl thioethers having the general formula:



where U represents O or S; and

R<sub>1</sub>-R<sub>6</sub> each independently represent an alkyl or aryl group, but R<sub>1</sub>-R<sub>5</sub> may each independently represent a functional group other than these, including, e.g., but not limited to, —COOR, —NO<sub>2</sub>, —NH<sub>2</sub>, —O—CH<sub>2</sub>—CH<sub>2</sub>—OH, —OH, —CHO, or -halogen; further

R<sub>1</sub>-R<sub>5</sub> may be bridged by suitable bifunctional substituents, such as, e.g., —(CH<sub>2</sub>)<sub>x</sub>—, or —(CH<sub>2</sub>)<sub>x</sub>—Z—(CH<sub>2</sub>)<sub>y</sub>— (where Z represents a hetero atom; x=0-7, and y=0-7), or preferably unsaturated substituents such as are characteristic of annellated ring systems, e.g. (but not limited to) naphthyl, phenanthryl, anthracenyl, quinolyl, isoquinolyl, or indolyl.

(1:15-42); wherein U=S,

R<sub>6</sub>=Me, R<sub>3</sub>=alkyl having a fused C<sub>0-7</sub> cycloalkyl ring R<sub>1</sub>=R<sub>2</sub>=R<sub>4</sub>=R<sub>5</sub>=H (2:60-67; 3:6-12; 4:48-46; 6:50-59).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Köhler *et al.* (US 5,387,718) as applied to claim 4 above, and further in view of Grab *et al.* (EP 1264547).

Regarding claim 5: Köhler *et al.* renders the basic composition obvious [as set forth above with respect to claim 4].

Köhler *et al.* does not teach household product containing alkylphenyl alkyl thioethers. However, Grab *et al.* teaches flavor and fragrance compositions {household products} containing 1-mercapto-1-phenylalkanes which have a natural spicy character (§ 1-2). Köhler *et al.* and Grab *et al.* are analogous art because they are concerned with a similar technical difficulty, namely the preparation of spicy fragrances composed of aryl thioethers. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined household products containing spicy fragrances composed of aryl thioethers, as taught by Grab *et al.* in the invention of Köhler *et al.*, and would have been motivated to do so since Grab *et al.* suggests that such aryl thioethers provide household products with a clear natural spicy character without any attendant dominant roasted note or accompanying pungent and putrid notes (§ 5), and is an equivalent alternative means of providing spicy fragrances composed of aryl thioethers.

#### ***Allowable Subject Matter***

Claims 2 and 9-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Köhler *et al.* does not specifically disclose the 1-cyclo{C<sub>3-6</sub>}alkylmethyl -4-methylsulfanyl-benzenes of instant claims 2 and 9. Black *et al.* (US 6,222,048) discloses cyclopentyl-(4-(methylthio)phenyl)-methanone, prepared by a Friedel-Crafts acylation of thioanisole with cyclopentanecarbonyl chloride {precursor to 1-cyclopentylmethyl -4-methylsulfanyl-benzene}, but there would be no motivation to reduce the ketone to afford 1-cyclopentylmethyl -4-methylsulfanyl-benzene.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See attached form PTO-892.

### **Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PEPITONE whose telephone number is (571)270-3299. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO, Ph.D./  
Supervisory Patent Examiner, Art Unit 1796  
18-Jul-08

MFP  
15-July-08